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09/220,436	12/24/1998	AARON ABBOTT	P-5350	3501

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PIPER MARBURY RUDNICK & WOLFE LLP
STEVEN B KELBER
1200 NINETEENTH STREET, NW
WASHINGTON, DC 20036-2412

EXAMINER
WILLETT, STEPHAN F

ART UNIT	PAPER NUMBER
2141	22

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No. 09/220,436	Applicant(s) Abbott et al.	
	Examiner Stephan Willett	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ___3___ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Mar 11, 2003* _____ .

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-10* _____ is/are pending in the application.

    4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1, 2, 4-7, 9, and 10* _____ is/are rejected.

7) ☒ Claim(s) *3 and 8* _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some* c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892).

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____

U. S. Patent and Trademark Office
PTO-326 (Rev. 04-01)   Office Action Summary   Part of Paper No. **20**

DETAILED ACTION

Allowable Subject Matter

1.　　Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Drawings

2.　　The drawings are objected to because of the informalities noted on the attached PTO 948. Correction is required.

3.　　This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 112

4.　　The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5.　　Claims 4 and 9 recites the limitation "the software component" instead of "a software component. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson et al. with Patent Number 5,758,351 in view of Pettus et al. with Patent Number 5,832,219.

9.   Regarding claims 1 and 6, Gibson teaches a system to enhance the capability of server computers. Gibson teaches a client component: a server component, said client component arranged to make requests to said server component, col. 6, lines 5-8, col. 2, lines 4-5. Gibson teaches means maintaining a representation of requests which can be satisfied by said server, col. 6, lines 8-11. Gibson teaches said request intercepting component thereafter passing the request on to said server to execute, col. 6, lines 55-56. Gibson teaches a request intercepting component, arranged to intercept requests from said client component to said server component, and to

establish from said representation if a request is supported by the server; wherein said request

intercepting component is arranged to search external sources to locate and provide to said server

an executable functionality if required for said server to support said request if said request is not

currently supported, col. 7, lines 33-34. Gibson teaches intercepts hidden to the client, col. 8,

lines 5-10. Gibson teaches the invention in claim 1 except for explicitly searching for a

predefined function in a request. In that Gibson operates to enhance functionality, the artisan

would have looked to the processing arts for details of locating functionality. In that art, Pettus, a

client/server system, teaches "a server node in order to make a new service available on the

network for use by application programs", col. 10, lines 36-37 in order to achieve the desired

functionality. Pettus specifically teaches the "service program then retrieves the service object

including network configuration data", col. 11, lines 56-57. Searching for function availability is

taught. Further, Pettus suggests that "the request table can be used to locate an appropriate

function address when a service request is received", col. 13, lines 43-45 which will result from

implementing his command determining functions. The motivation to locate functionality

insures the objects have the most desired functionality. Thus, it would have been obvious to one

of ordinary skill in the art to incorporate the functionality finder as taught in Pettus into the

enhanced capability locator described in the Gibson patent because Gibson operates with new

functionality and Pettus suggests that new functions can be found and used to increase

functionality. Therefore, by the above rational, the above claims are rejected.

10.   Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyouchi

et al. with Patent Number 6,006,251 in view of Ratcliff et al. with Patent Number 6,009,467.

11.   Regarding claims 1 and 6, Toyouchi teaches a system to enhance the capability of server

computers. Toyouchi teaches a client component: a server component, said client component

arranged to make requests to said server component, col. 7, lines 27-32. Toyouchi teaches means

maintaining a representation of requests which can be satisfied by said server, col. 7, lines 50-53.

Toyouchi teaches said request intercepting component thereafter passing the request on to said

server to execute as "the service providing computer 2", col. 7, lines , col. 20-21 and, lines 4-8.

Toyouchi teaches a request intercepting component, arranged to intercept requests from said

client component to said server component, and to establish from said representation if a request

is supported by the server; wherein said request intercepting component is arranged to search

external sources to locate and provide to said server executable functionality if required for said

server to support said request if said request is not currently supported, col. 10, lines 56-65.

Toyouchi teaches intercepts transparent to the client, col. 10-11, lines 66-16 since the client has

no knowledge of the background operations taking place to satisfy their request. Toyouchi

teaches the invention in claim 1 except for explicitly a request intercepting component, arranged

to intercept requests from said client component to said server component, and to establish from

said representation if a request is supported by the server; wherein said request intercepting

component is arranged to search external sources to locate and provide to said server additional

functionality if required for said server to support said request if said request is not supported. In

that Toyouchi operates to enhance functionality, the artisan would have looked to the processing

arts for details of locating functionality. In that art, Ratcliff, a client/server system, teaches "an

apparatus for dynamically providing a host information about all functions supported by a

communication platform provided in a computing network environment", abstract, lines 1-3 in

order to achieve the desired functionality. Ratcliff specifically teaches the "query IP-Assist

function allows the TCP-UDP/IP to query the channel attached device to determine which TCP-UDP/IP functions are implemented in the device", col. 6, lines 53-55. Searching for function availability is taught. Further, Ratcliff suggests that "this allows TCP-UDP/IP to individually select which functions it desires to use", col. 7, lines 1-2 will result from implementing his command determining functions. The motivation to locate functionality insures the objects have the most desired functionality. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the functionality finder as taught in Ratcliff into the enhanced capability locator described in the Toyouchi patent because Toyouchi operates with new functionality and Ratcliff suggests that new functions can be found and used to increase functionality. Therefore, by the above rational, the above claims are rejected.

12.   Claims 1-2, 4-7, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cobb et al. with Patent Number 5,956,506 in view of Chow et al. with Patent Number 6,029,175.

13.   Regarding claims 1 and 6, Cobb teaches a system to enhance procedural software using objects. Cobb teaches a client component: a server component, said client component arranged to make requests to said server component as "the application comprises a number of objects that exchange messages to accomplish the actions required by the transaction", col. 4, lines 25-27. Cobb teaches means maintaining a representation of requests which can be satisfied by said server as "the classes and methods of the mapping encapsulate the system software function", col. 3, lines 36-37. Cobb teaches said request intercepting component thereafter passing the request on to said server to execute as "this allows unique behavior to be introduced on a per-action or per-transaction basis", col. 3, lines 57-59. Cobb teaches a request intercepting component, arranged to intercept requests from said client component to said server component,

and to establish from said representation if a request is supported by the server; wherein said

request intercepting component is arranged to search external sources to locate and provide to

said server executable functionality if required for said server to support said request if said

request is not currently supported as "some of the key procedural transaction functions must be

intercepted and the data from them provided to the implementation classes", col. 7, lines 63-65

and at col. 7, lines 18-27 and "the Revision Manger acts as an intermediary", col. 9, lines 52-53.

Cobb teaches intercepts transparent to the client, col. 10, lines 32-48 since the client has no

knowledge of the background operations taking place to satisfy their request. Cobb teaches the

invention in claim 1 except for explicitly a request intercepting component, arranged to intercept

requests from said client component to said server component, and to establish from said

representation if a request is supported by the server; wherein said request intercepting

component is arranged to search external sources to locate and provide to said server additional

functionality if required for said server to support said request if said request is not supported. In

that Cobb operates to modify objects, the artisan would have looked to the client/server object

arts for details of implementing new versions of objects. In that art, Chow, a client/server

system, teaches a "Revision manager is connected to function as an intermediary between a

number of Mosaic browsers", col. 9, lines 33-34 in order to "automatically be provided with

updates to a document of interest" col. 9, lines 59-60. Chow specifically teaches "the Revision

Manager acts as an intermediary between browser client and a Remote HTTP server", col. 9,

lines 52-54 and "the Revision Manager Polling Daemon periodically and spontaneously scans the

root directory", "if there is at least one client which is to be notified in the case the document has

been changed", col. 10, lines 47-49, 55-56 and "an intelligent network agent intercepts

transactions between clients and servers to perform DILS functions such as automatically

receiving updated files", abstract. Commands are intercepted and objects or documents are

found to better satisfy the command. Further, Chow suggests that "automatically retrieving

changed documents previously accessed from network and Internet work server", col.3 , lines 61-

63 will result from implementing his command interceptor. The motivation to incorporate a new

or advanced object version insures the objects have more functionality. Thus, it would have been

obvious to one of ordinary skill in the art to incorporate the new version finder as taught in Chow

into the enhanced objects described in the Cobb patent because Cobb operates with new objects

and Chow suggests that new objects can be found and used to increase functionality

"automatically be[ing] provided with updates to a document of interest", col. 9, lines 59-60.

Therefore, by the above rational, the above claims are rejected.

14.   Regarding claims 2 and 7, Cobb teaches said client and server components comprise

objects in one or more computer programs as "the more specific object can 'inherent' all of the

data and methods of the parent object", col. 3, lines 11-12. Thus, the above claim limitations are

obvious in view of the combination.

15.   Regarding claims 4 and 9, Cobb teaches a software program, the server component

comprises an operating system shell called by the software component, and the request

intercepting component is a command interpreter as "the system software application

programming interface defines the functions that the software will provide and specifies the

information that must be sent to execute that function", col. 3, lines 30-32. Thus, the above

claim limitations are obvious in view of the combination.

16.   Regarding claims 5 and 10, Cobb teaches computer system is a CORBA distributed

system, wherein said client and server components are objects on said system and wherein said request intercepting component is in Object Request Broker as "CORBA defines the interactions between objects, col. 4, lines 14-16. Thus, the above claim limitations are obvious in view of the combination.

Response to Amendment

17.   The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.

18.   The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

19.   Applicant suggests they "agree, that Toyouchi fails to teach the 'request intercepting component'", Paper No. 19, Page 3, lines 9-10. However, Toyouchi teaches said request intercepting component thereafter passing the request on to said server to execute as "the service providing computer 2", col. 7, lines , col. 20-21. The references should not be read in a vacuum, the teachings are not mutually exclusive, and must be taken in context of what was reasonable based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

20.   Applicant suggests "any new addition or deletion of hosts must be input by the user", Paper No. 19, Page 4, lines 8-9. However, Ratcliff specifically teaches the "query IP-Assist function allows the TCP-UDP/IP to query the channel attached device to determine which TCP-UDP/IP functions are implemented in the device", col. 6, lines 53-55 as an intercepting function.

Thus, Applicant's arguments can not be held as persuasive regarding patentability.

21.   Applicant suggests they "agree, that Cobb fails to teach the 'request intercepting component'", Paper No. 19, Page 4, lines 9-10. However, Cobb teaches "the Revision Manager acts as an intermediary", col. 9, lines 52-53. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

22.   Applicant suggests "Chow system requires that the client specify in advance 'object of interest'", Paper No. 19, Page 5, lines 9-10. However, Chow teaches "an intelligent network agent intercepts transactions between clients and servers to perform DILS functions such as automatically receiving updated files", abstract. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

Conclusion

23.   THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time
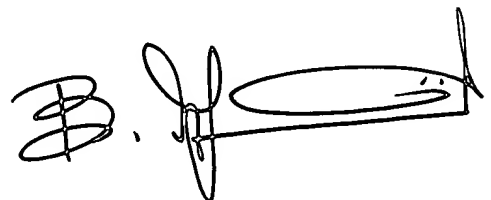
policy as set forth in 37 CFR 1.136(a).

24.   A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

25.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner

can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

26.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Wiley, can be reached on (703) 308-5221. The fax phone number for the

organization where this application or proceeding is assigned is (703) 746-7239.

27.   Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-9605.

sfw